IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Andrew M. Hatch, et al.

Group Art Unit: 1751

Examiner: Lorna M. Douyon

Serial No.: 10/763,438

Filed: January 23, 2004

For: CLEANER COMPOSITION FOR FORMED METAL ARTICLES

Attorney Docket No.: HSTI 0135 PUS1

PRE-APPEAL BRIEF

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Sir:

REMARKS

Rejection of Claim 18 Under 35 U.S.C. § 112

This rejection of claim 18 is not the subject of this appeal.

Rejection Of Claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 and 35 Under 35 U.S.C. § 103(a)

Claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bershas et al. (U.S. Patent No. 5,476,601). Independent claims 1, 19, and 27 limit the present invention to specific pH ranges that are particularly useful for cleaning applications. Specifically, claim 1 requires that the inorganic pH adjusting component is "present in an amount such that the pH of the cleaning composition is less than 2." Independent claims 19 and 27 require that the inorganic pH adjusting component is "present in an amount such that the pH of the cleaning composition is less than 2 or between 9 and 13." Bershas et al. discloses lubricant and surface conditioner compositions that are different than the cleaning solutions of the present invention. Bershas

et al. explicitly teaches different pH ranges. (Bershas et al., col. 9, l. 62- col. 10, l. 10). Moreover, Bershas et al. explicitly teaches away from the pH ranges of claims 1, 19, 26, 36, and 45, stating that ranges outside of its teachings are undesirable. The Examiner states in the February 13, 2007 Final Office Action that Bershas et al. teaches "that the treatment composition which comprises the lubricant and surface conditioner would generally have a pH between about 1 and about 6.5." The Examiner refers to Bershas et al, col. 13, ll. 3-9 to support this proposition. The Applicants respectfully assert that the validity of this assertion is unclear. The cited passage also states that the cans are exposed to an acid rinse. It is unclear when this pH range refers to the acid rinse, the lubricant and surface conditioner, or the combination of the acid rinse and the lubricant surface conditioner. It is revealing that not a single example in Table 7 of Bershas et al. provide a pH lower than 2. Even if the Examiner's interpretation of Bershas is correct regarding disclosure of a pH range between 1 and 6.5 is correct. The narrower ranges disclosed in the present invention as used in the present invention are allowable under MPEP §2131.03. It should be appreciated that the ability of any particular composition to meet the limitations of the present invention are not predictable. The results provided in the Specification in Tables 1-7 clarify this point since there are many compositions that do not provide compositions suitable for cleaning aluminum cans.

The Examiner dismisses the significance of the limitations on the compositions of independent claims 1, 19, and 27. These limitations are as follows, claim 1 requires a composition having "an average water-break-free percent reduction of less than 50% after 7 days aging;" claim 19 requires a composition "capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition;" and claim 27 requires a composition having a "cloud point of a working composition of the cleaning composition is greater than about 125° F." These limitations are not intended use as the Examiner suggests. Instead, these are properties of the cleaning compositions composition just like "melting point" is a property of a crystal. These limitations are the properties by which those skilled in the art characterize cleaning

compositions. Moreover, the results provided in Tables 1-7 of the present invention illustrate the sporadic nature of identifying useful compositions. The development of such compositions by optimization is not feasible due to this sporadic nature. Accordingly, Claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 and 35 are allowable under 35 U.S.C. § 103(a) over Bershas et al.

Rejection Of Claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 And 35 Under 35 U.S.C. § 103(a)

Claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 and 35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Banaszak et al. (U.S. Patent No. 5,584,943). Banaszak et al. also does not teach cleaning compositions having the pH ranges of independent claims 1, 17, 26, 36, and 45. Table 5 of Banaszak et al. shows compositions with pH values from 2 to 6 which are clearly not less "than 2" or "from 9 to 13." Banaszak is also deficient for failing to disclose a composition having "an average water-break-free percent reduction of less than 50% after 7 days aging" (claims 1 and 64); capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition (claim 19) cloud point of a working composition of the cleaning composition is greater than about 125° F (27). Again, the Examiner fails to recognize the significance of the limitations on the compositions of independent claims 1, 19, and 27. These limitations, as set forth above, are not intended use as the Examiner suggests. Instead, as set forth above, these are properties of the cleaning compositions composition. Accordingly, for at least this reaction, claims 1-4, 7, 9, 16, 17, 19, 20, 24, 26-29, 33 and 35 are allowable under 35 U.S.C. § 102(b) over Banaszak et al.

Rejection Of Claims 1-14 And 16-52, 64-74 Under 35 U.S.C. § 103(a)

Claims 1-14 and 16-52, 64-74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. (U.S. Patent No. 6,214,777). Li et al. discloses lubricating compositions with pH ranges that are different than amended claim 1. The pH ranges of Li et al. are higher than 2 are required by claim 1. Regarding independent claims 1, 19, 26,

36,45, and 64, the Examiner states that Li et al. does not disclose "the linear alkyl group and ethoxy groups as those recited." The Examiner attempts to dismiss this serious deficiency of Li et al. by stating that "it has been held obvious to select a value in a known range by optimization for the best results." The limitation in dispute is "wherein R_1 is a saturated or unsaturated, straight-chain or branched alkyl having from 14 to 80 carbon atoms." It should be pointed out that this is a structure limitation on a **component** of the cleaning solution. It is not a limitation that can be merely varied for optimization purposes. Independent claims 1, 19, 27, and 64 are further allowable for similar reasons set forth above regarding the cleaning solution specific limitations. Li et. al only discloses lubricating compositions. Again, claims 1, 19, and 27 include the following cleaning solution specific limitations - "the cleaning composition has an average water-break-free percent reduction of less than 50% after 7 days aging" in claim 1, "the cleaning composition is capable of cleaning an exterior wall of an aluminum can such that the percent of total surface area of the exterior wall which supports a continuous film of water is greater than 50% after the aluminum can is cleaned with the cleaning composition" in clam 19, and "the cloud point of a working composition of the cleaning composition is greater than about 125° F" in claim 27. Accordingly, claims 1-14 and 16-52, 64-74 are allowable under 35 U.S.C. § 103(a) over Li et al.

Rejection of Claims 19-22, 25-31, 34-41, 44-48, 51-52, 64-74 Under 35 U.S.C. § 103(a)

Claims 19-22, 25-31, 34-41, 44-48, 51-52, 64-74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 6,328,816). The Examiner concedes a plethora of deficiencies in Carlson et. The first group of deficiencies are related to the cleaning composition not having certain necessary properties. These were discussed adequately above for Bershas. As stated above, these limitations are not intended use but are instead, characteristic properties of the composition. The inappropriateness of the Examiner's analysis regarding the number of R groups is set forth above with respect to the rejection under Li et al. Again, the number of R groups is not a parameter subject to optimization. Instead, it is a defining structure property of the ethoxylated alcohol. Accordingly, claims 19-22, 25-31, 34-41, 44-48, 51-52, 64-74 are allowable under 35 U.S.C. § 103(a) over Carlson et al.

Rejection Of Claims 19-52, 64-74 Under 35 U.S.C. § 103(a)

Claims 19-52, 64-74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardola et al. (WO 00/12661). Cardola is also deficient regarding the characteristic properties of the cleaning compositions of the present invention. Again, Cardola is deficient for failing to disclose useful characteristic properties of the cleaning compositions. The inappropriateness of the Examiner's analysis regarding the number of R groups is set forth above with respect to the rejection under Li et al. Again, the number of R groups is not a parameter subject to optimization. Finally, even though Cardola does not provide the requisite pH ranges, the Examiner states that this too can be determined by optimization. The Examiner's position appears to be that any missing feature is merely obtainable by optimization. Again, the unpredictability of the properties of the compositions provided in Tables 1-7 of the Specification emphasizes the inappropriateness of discovery and the useful compositions of the invention by optimization. Accordingly, claims 19-52, 64-74 are allowable under 35 U.S.C. § 103(a) over Cardola et al. (WO 00/12661).

Respectfully submitted,
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Date: June 13, 2007
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